

Abstract of the Disclosure

5 A method to trace, detect, discover and monitor the nodes traversed by a light
path from its source to its destination in an Optical Communication Network (OCN) is
provided. In accordance with the embodiment of the invention, the system examines
various provisioned and discovered optical nodes either sequentially or in parallel to
determine whether a unique signature (wavekey) associated with the light path is
present. Connectivity and mis-fiber problems are detected by sequentially
10 examining provisioned nodes in the light path to determine if the wavekey
associated with the light path can be observed. Control Network topology
information is utilized to contact all nodes in the network to trouble-shoot mis-fiber
problems.

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